Check one of the following: ☐ New Permit	□ Permit Renewal #	- SDP -	- PCS	□ Permit
Amendment				



IOWA DEPARTMENT OF NATURAL RESOURCES SINGLE-USE LANDFARMING PERMIT APPLICATION



Landfarming agencies must complete a single-use landfarming permit application if the site to be used is for only one application of a particular source and type of petroleum contaminated soil (PCS). Single-use landfarming permit applications must be accompanied by the analyses and additional information required by the applicable landfarming rules under lowa Administrative Code (IAC) 567 Chapter 120.

Send the completed application with attached information to:

Planning, Permitting & Engineering Section Energy & Waste Management Bureau Iowa Department of Natural Resources 502 E 9th Street Des Moines, IA 50319

Fax: (515)-281-8895

Questions contact Matt McDonald at (515)-281-8150 or matt.mcdonald@dnr.state.ia.us

SECTION 1. CONTACT INFORMATION [IAC 567 120.5(2) "a"]

Provide the name, address and telephone number for the following in accordance with IAC 567-120.5(2) "a".

SECTION 1. CONTACT INFORMATION CONTINUED...

Individual Responsible for the Record Keeping and Reporting of Single-Use Landfarm	
Name:	
Street Address:	
City: State: Zip Code:	
Phone Number:	
Emergency Contact for Single-Use Landfarm	
Namo	
Name:	
Street Address:	
City: State: Zip Code:	
Phone Number:	
SECTION 2. PERMIT APPLICATION CHECKLIST Checking the appropriate boxes below certifies that the documents submitted in conjunction with the application form are complete and in compliance with chapter 120 of the lowa Administrative Code. copies of each document shall be submitted. If an application is found by the department to be incomay be denied and returned to the applicant.	Three (3)
Required Document	Attached
Plan of operations in accordance with IAC 567-120.5(2) "b"	
Emergency Response and Remedial Action Plan (ERRAP) in accordance with IAC 567-120.5(1) "c"	
SECTION 3. SIGNED STATEMENT FROM AGENCY OWNER(S) [IAC 567-120.5(2) "d"]	
I certify under penalty of law that I am the owner, operator, or authorized representative of the agency for which this application is submitted, and that I have examined and am familiar with the reoperation through this permit that I have applied for herein, and that the information I have proaccurate and complete.	quirements of
I further certify that the construction and operation of landfarms by this agency will be in accord plans, specifications, reports and related communications accepted by the lowa Departmen Resources and on file in its office; and in accordance with conditions imposed in the permit issue Department of Natural Resources and guarantee that this Agency will comply with lowa Admini 567—Chapter 120.	nt of Natural d by the lowa
Signature: Date:	
Printed Name:	

PLAN OF OPERATIONS REQUIREMENTS [IAC 567-120.5(2) "b"]

Attach a Plan of Operations that complies with the requirements below in accordance with IAC 567-120.9(455B):

Subrule:	Requirement
120.9(1)	Standard PCS. Only Standard PCS may be land applied or stored at a landfarm without a permit from the department. A permit amendment from the department, pursuant to subrule 120.4(10), shall be obtained for each particular source and type of nonstandard before the PCS may be land applied or stored at a landfarm. The permit amendment application shall include a justification of how much PCS can be safely and effectively remediated by landfarming.
120.9(2)	Saturated, Slurry, or Flammable PCS. PCS in a saturated, slurry, or flammable condition shall not be land applied or stored at a landfarm. PCS in such a condition shall be bulked with other biodegradable materials (e.g., compost, mulch) until it is no longer saturated, in a slurry, or flammable before it is land applied or stored at a landfarm.
120.9(3)	 PCS Storage. PCS that cannot immediately be land applied at the landfarm during landfarm season may be stored at the landfarm as follows. PCS delivered during nonlandfarm season may be stored until the conditions of subrule 120.9(4) are satisfied or within the first seven days of landfarm season, whichever is shorter. a. 7-days or less. PCS may be stored no longer than seven days in compliance with the following requirements: Over an impervious surface (e.g., tarp, concrete pad, plastic sheeting).
	 (2) Under a roof or tarp to minimize the infiltration of precipitation. (3) In an area with minimal potential for stormwater run-on. b. Extended storage time. No PCS shall be stored longer than seven days during landfarm season without written permission from the department field office that has jurisdiction over the landfarm. PCS application weather and landfarm season.
120.9(4)	 a. PCS shall only be land applied during non-landfarm season if the PCS must be land applied as part of an emergency cleanup supervised by the department pursuant to subrule 120.6(1), or all of the following conditions exist: The operating area is free of snow. The slope of the operating area is less than 3 percent. The PCS is incorporated into the soil as soon as site conditions allow.
120.9(5)	 b. PCS shall not be land applied during precipitation. One application, source and type of PCS per plot. One application of a particular source and type of PCS may be applied to a landfarm plot. A landfarm may only apply a subsequent application of PCS to a previously utilized landfarm plot if such application is in compliance with the following: a. A subsequent application of a particular source and type of PCS may be applied to a previously utilized landfarm plot in a multiuse landfarm after the following requirements have been met: The plot has been tested pursuant to subparagraphs 120.6(2)"c"(1), (2), and (3), and the results demonstrate that petroleum constituent concentrations are less than 0.54 mg/kg for benzene, 42 mg/kg for toluene, 15 mg/kg for ethylbenzene, 3800 mg/kg for TEH-diesel and 0.02 mg/kg for MTBE. The PCS turning requirement of subrule 120.9(10) has been completed.
120.9(6)	PCS application rates. PCS shall be land applied at a rate that is as uniform as practical over an area sufficient to satisfy the greater of the following area requirements. However, PCS from an emergency cleanup supervised by the department pursuant to subrule 120.6(1) may instead be land applied at a rate of 162 ft2 of landfarm area per cubic yard (yd3) of PCS, that is as uniform as practical, and in which no layer of unincorporated PCS is thicker than 2 inches. a. Petroleum constituents. PCS shall be land applied over the largest area required by the following: Benzene. PCS contaminated with benzene shall be land applied in accordance with Table 1. The average concentration of benzene in the PCS shall be used to determine the landfarm area (ft²) required per cubic yard (yd³) of PCS to be land applied. The average concentration of benzene shall be calculated from all soil boring test results that are within the PCS excavation area. The application shall be as uniform as practical over the area required.

PLAN OF OPERATIONS REQUIREMENTS CONTINUED...

Subrule:	Requirement					
		Table 1				
	Average concentration of benzene (mg/kg)	Ft ² of landfarm area per yd ³ of PCS applied	Maximum thickness of unincorporated PCS	Yd ³ of PCS per acre of landfarm		
	0 < mg/kg < 10	81 ft ²	4 inches	537 yd ³		
	10 < mg/kg < 20	162 ft ²	2 inches	268 yd ³		
	20 < mg/kg	324 ft ²	1 inch	134 yd ³		
	(2) Toluene, ethylbenzene, xylene, and TEH-diesel. PCS that is not contaminated with benzene or MTBE, but is contaminated with toluene, ethylbenzene, xylene, THE-diesel, or some combination thereof, shall be land applied at a rate of 81 ft2 of landfarm area per cubic yard (yd3) of PCS. The application shall be as uniform as practical, and no layer of unincorporated PCS shall be thicker than 4 inches.					
	 b. Total heavy metals. PCS that has been tested for heavy metals pursuant to subparagraph 120.6(2)"c"(4) shall be applied at a rate that is as uniform as practical, that results in no layer of PCS is thicker than 4 inches, and that upon incorporation produces a landfarm soil that satisfies the following requirements. This analysis requires prior testing of background levels of heavy metals at the proposed landfarm site. (1) Total heavy metals are less than 2,500 milligrams per kilogram (mg/kg). (2) Any particular concentration of a heavy metal is less than the appropriate statewide standard for soil developed pursuant to 567—Chapter 137. 					
120.9(7)		lagging. The landfarm plot(s) upon which PCS is land applied shall be flagged for one year after and application or until the landfarm is closed pursuant to rule 567120.12(455B), whichever is horter.				
120.9(8)	properly disposed of. All ru	Removal of solid waste and rubble. All solid waste that is not PCS (e.g. pipe) shall be removed and properly disposed of. All rubble, stones, and debris larger than 4 inches in diameter, or that interfere with incorporating and turning the PCS, shall be removed and properly disposed of.				
120.9(9)	PCS incorporation. PCS shall be incorporated into the soil by tilling, disking, or other suitable means within 48 hours of being land applied or before the next precipitation event, whichever is sooner. PCS shall not be incorporated deeper than 12 inches.					
120.9(10)		urning the PCS. After incorporation, the PCS shall be turned by tilling, disking, or other suitable eans at least once per month for the first three months during landfarm season.				
120.9(11)				os for human or livestock closed pursuant to subrule		
120.9(12)	Water quality. A multiuse landfarm shall not accept additional PCS if evidence of surface water or proundwater contamination exists. Such evidence includes, but is not limited to, a visible sheen on mmediately downgradient surface waters or downgradient monitoring well test results greater than wo standard deviations of mean analyte concentrations in corresponding upgradient monitoring wells. Responsible parties shall notify the department within 6 hours of discovery of contamination of a water of the state by calling (515) 281-8694. The acceptance of PCS shall be suspended until written rerification has been received from the department that the site is not or is no longer contaminating surface water or groundwater.					

Removal of PCS from a landfarm. PCS shall not be removed from a landfarm until the landfarm is closed pursuant to rule 567--120.12(455B) or the following conditions are met:

a. One sample from each 2,500 ft2 (e.g., 50-foot x 50-foot area) of landfarm plot is analyzed pursuant to subparagraphs 120.6(2)"c"(1), (2), and (3). A minimum of one sample per landfarm plot shall be obtained. All samples shall be obtained from between the top 2 to 6 inches of soil.

b. The results of the tests in paragraph 120.12(1)"a" demonstrate that petroleum constituent concentrations for benzene, toluene, ethylbenzene, TEH-diesel, and MTBE are below the detection limits required by 567—Chapter 135.

be maintained by the landfarm.

c. Records of the lab results, amount of PCS removed, and the exact final location of the PCS shall

EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN [IAC 567-120.5(1) "c"]

Attach an Emergency Response and Remedial Action Plan (ERRAP) for the landfarming agency with this application. The ERRAP may be submitted in a format chosen by the applicant, but shall, at a minimum, contain the components listed below and in lowa Administrative Code rule 567-120.10 "Emergency response and remedial action plans."

In accordance with IAC 567-120.10(1), ERRAP documents shall be readily available and single-use landfarm applicators shall have employees carry a copy of the ERRAP document to each site where operations are taking place.

Subrule:	Requirement
120.10(4)	Facility information. (1) Permitted agency. (2) DNR permit number. (3) Responsible official and contact information. (4) Project location. (5) Facility description. (6) Site and environs map. Weather-related events. (1) Intense rainstorms and erosion. (2) Intense rainstorms or flooding impacting site access and usability. Fire and explosions. (1) Flammable PCS. (2) Buildings onsite. (3) Equipment. (4) Waste gases from PCS. (5) Off-site fires or explosions at cleanup site or during transport. Spills and releases. (1) Saturated or slurry PCS. (2) Free liquids from stored PCS. (3) Spill of PCS during transport. Hazardous materials. (1) Hazardous materials. (1) Hazardous gases. Emergency, spill and release notification and reporting. (1) Emergency response agencies. (2) Federal agencies. (3) State agencies. (4) County and city agencies. (5) Special populations near site. (6) Reporting requirements and forms. (7) News media. Primary emergency equipment inventory. (1) Major equipment. (2) Fire hydrants and water sources. ERRAP training requirements. (1) Training providers. (2) Employee orientation. (3) Annual training updates. (4) Training completion and record keeping.